## **Underwater Acoustics: 2020 DOSITS Webinar Series**

How are Passive Acoustics Data Used to Inform the Decision-Making Process?

Thursday, October 22, 2020 at 12pm ET

Elizabeth Henderson – U.S. Naval Information Warfare Center (NIWC), Environmental Readiness Branch

## **Webinar Outline:**

- Introduction to Passive Acoustic Monitoring
  - o Passive vs. Active Acoustics
- How does Passive Acoustic Data help with Decision Making?
- Passive Acoustic Data Types
- Passive Acoustic Data Questions and Capabilities
- Presence/Absence Methods and Questions
  - Application of Presence/Absence Data to Decision Making
- Behavior Methods and Questions
  - o Application of Behavioral Data to Decision Making
- Localizing/Tracking Individuals Methods and Questions
  - Application of Localized/Tracked Animals to Decision Making
- Estimation of Abundance/Density
  - Application of Abundance/Density Estimates to Decision Making
- Using Acoustic Tags
  - o Application of Acoustic Tag Data to Decision Making
- Examples of Decision-Making Tools utilized by Government Agencies
  - NMFS, Navy, BOEM all use different tools to assess impacts

## **DOSITS Links:**

Science of Sound > How do people and animals use sound in the sea? https://dosits.org/science/sounds-in-the-sea/people-animals-use/

People and Sound > How is sound used to measure marine mammal abundance?

https://dosits.org/people-and-sound/investigate-marine-animals/how-is-sound-used-to-estimate-marine-mammal-abundance/

People and Sound > How is sound used to study marine mammal distribution?

https://dosits.org/people-and-sound/investigate-marine-animals/how-is-sound-used-to-study-marine-mammal-distribution/

People and Sound > How is sound used to protect marine mammals?

https://dosits.org/people-and-sound/investigate-marine-animals/how-is-sound-used-to-protect-marine-mammals/

People and Sound > How is sound used to study the distribution of marine fishes?

https://dosits.org/people-and-sound/investigate-marine-animals/how-is-sound-used-to-study-the-distribution-of-marine-fishes/

Technology Gallery > Passive Acoustic Recording Tags

https://dosits.org/galleries/technology-gallery/observing-and-monitoring-marine-animals/passive-acoustic-recording-tags/

## Technology Gallery > Archival Marine Acoustic Recording Units

https://dosits.org/galleries/technology-gallery/observing-and-monitoring-marine-animals/archival-marine-acoustic-recording-units-arus/

Technology Gallery > Real-time Passive Acoustic Sensors

https://dosits.org/galleries/technology-gallery/observing-and-monitoring-marine-animals/real-time-passive-acoustic-sensors/